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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/579,265
Filing Date: May 04, 2007
Appellant(s): BODECKER ET AL.

Eugene L. Szczecina, Jr.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/8/2010 appealing from the Office action mailed 12/04/2009.

(1) Real Party of Interest

The real party in interest for this patent application is Medos International S.a.r.l., Rue Girardet 29, 2400 Le Locle, Switzerland a wholly owned subsidiary of Johnson & Johnson, a New Jersey corporation.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 2, 7, 15 and 17 have been cancelled.

Claims 1, 3-6, -14, 16 and 18 have been finally rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being

Art Unit: 3736

maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

6,083,174	Brehmeier-Flick et al.	7-2000
6,193,656	Jeffries et al.	2-2001

B-Flick et al. "Study and Development of a Portable Telemetric Intracranial Pressure Measurement Unit." 19th International Conference Proceedings, IEEE/EMBS Oct. 30 – Nov. 2, 1997 Chicago, IL USA (hereinafter referred to as "B-Flick").

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3736

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

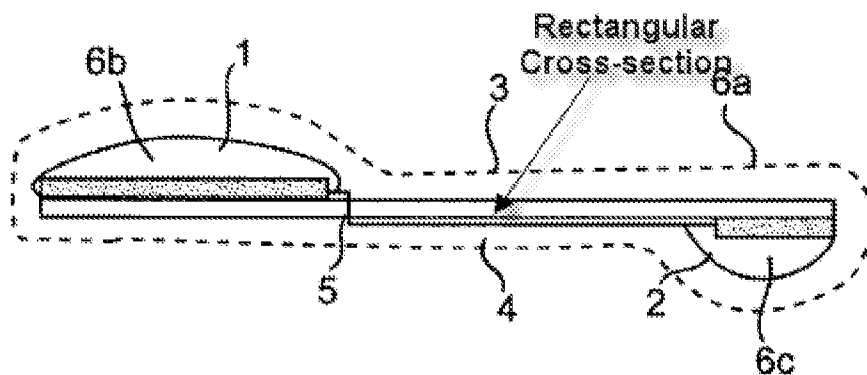
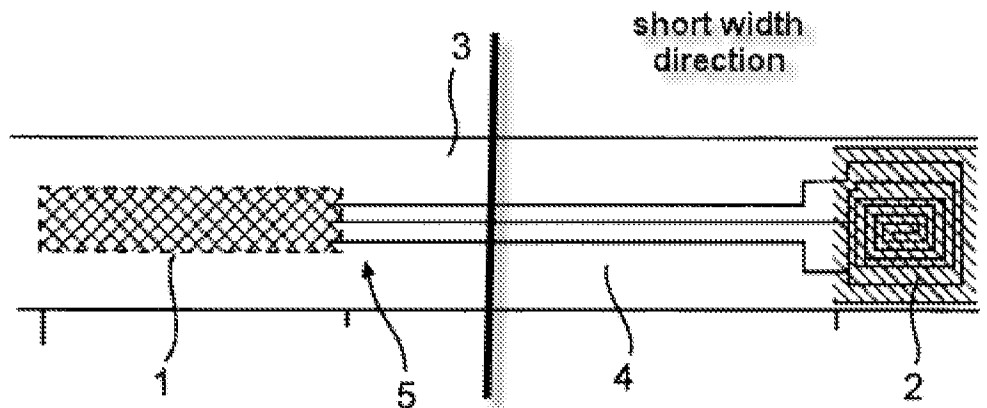
3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-6, 8-15, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brehmeier-Flick et al. (US 6083174) in view of Jeffries et al. (US 6193656) and B-Flick et al. "Study and Development of a Portable Telemetric Intracranial Pressure Measurement Unit." 19th International Conference Proceedings, IEEE/EMBS Oct. 30 – Nov. 2, 1997 Chicago, IL USA.

Regarding **claim 1** Brehmeier-Flick discloses an implant comprising a sensor device (sensor element 1, see Column 4, Line 19) being fixedly connected to a first end

Art Unit: 3736

of a longitudinal carrier (flexible foil 3, see Column 4, Line 20 and Figure 1); and an inductive coil (telemetry unit 2, see Column 4, Line 22) connected to the sensor device via electrical connection lines (strip conductors 4, see Column 4, Line 20) that are arranged on the longitudinal carrier; a covering encapsulating the sensor device (layer 6b, See Column 4, Line 39), the carrier with the connection lines (layer 6a, See Column 4, Line 37), and the coil (6c, See Column 4, Line 39) ; wherein the carrier has a sufficient rigidity such that the sensor device is adapted to be guided by the carrier during implantation to a target position and held in position at the target position (the flexible foil 3 is easy to implant because it can be slid under the skin without twisting or being moved in a undesirable direction, see Column 4, Lines 24-27, Figure 2 shows the flexible foil 3 which a sensor and telemetry unit 2 arranged thereon along with strip conducts, the sensor and telemetry unit each have a protective layer of 6b and 6c respectively, Figure 2 which is a cross -section view of the implant in Figure 1 shows the foil having a rectangular cross section see Figure 2, and furthermore Figures 1 and 2 combined show a foil 3 comprising a rectangular cross section along the shortest with dimension shown in Figure 1).

**FIG. 2****FIG. 1**

Brehmeier-Flick teaches the device wherein the carrier is formed of a thin flexible film which is rod-shaped with a rectangular cross-section, see Figures 1 and 2 above, wherein the carrier is substantially planar shape (Figures 1 and 2) and is bendable from said planar shape to a shape wherein the carrier is arranged at an angle relative to the

Art Unit: 3736

plan in which the coil windings of the inductive coil are arranged (the film is flexible and capable of bending such that the carrier is arranged at an angle to the coils 2). While

Brehmeier-Flick fails to explicitly state the carrier moves from a planar shape to a shape wherein the carrier is arranged at an angle of 60 to 120 degrees. The claim limitations are drawn structure implied by the process of using the device to permit the device to bend from a planar shape to an angle from 60-120 degrees. One of ordinary skill in the art at the time of the invention would recognize that the flexible film taught by Brehmeier-Flick is an equivalent structure (a thin film having flexibility) which can be bent from a flat shape to an angle, see page 2 of the applicant's specification.

The Applicant's specification discloses the structure which implied by the process of the carrier moving (bended) from a planar shape to an angle, "The carrier may for example be formed as thin polyimide foil which for stiffening may comprise a cambered form. The carrier may also be rod-shaped with a rectangular cross-section or a circle segment cross-section."

As mentioned above Brehmeier-Flick teaches a rod-shaped foil with a rectangular cross section. Brehmeier-Flick fails to teach the carrier material.

B-Flick teaches the carrier material is polyimide tape, See Page 978, Paragraphs 1-3.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the device taught by Brehmeier-Flick to include a polyimide carrier as taught by B-Flick in order to provide a biocompatible substrate for mounting the sensor and coil component. The device taught by Brehmeier-Flick in view

Art Unit: 3736

of B-Flick teaches equivalent structure to the applicant's disclosed invention which can be used in the process wherein the foil moves from a planar shape to an angled shape.

Brehmeier-Flick fails to disclose a device wherein the covering part has means for subcutaneous fastening. Jeffries teaches an implant comprising a covering part (housing 500, see Figures 5-8) having a means for subcutaneous fastening (eyelets 502 and 504, see Figure 5).

Both Brehmeier-Flick and Jeffries teach implant devices. Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the device disclosed by Brehmeier-Flick to include have a means for subcutaneous fastening as taught by Jeffries in order to connect the sensor to a site in the body, see Jeffries Column 2, Lines 25-33.

Regarding **claim 3**, Brehmeier-Flick further discloses a device wherein there are provided two connection lines between the coil and the sensor device (see Figure 1).

Regarding **claim 4**, Brehmeier-Flick further discloses a device wherein the carrier is flat (see Figure 2).

Regarding **claims 5-6**, Brehmeier-Flick further teaches a device further comprising a stiffening foil being provided in the covering part (the flexible foil while being the carrier also provides stiffening for successful implantation, see Column 4, Lines 24-27) and the carrier is formed as a foil (flexible foil 3) .

Regarding **claim 8 and 9**, Brehmeier-Flick further discloses a device wherein a frame formed in one piece with the carrier (area of the carrier immediately surrounding the sensor, see Figure 1) is fastened at the first end of the carrier, the sensor device

Art Unit: 3736

positively fits within the frame (the sensor device fits within the frame area of the carrier, see Figure 1).

Regarding **claim 10**, Brehmeier-Flick further discloses a device wherein the carrier is formed as a common carrier (all of the components are arranged on the flexible foil 3, see Column 4 Lines 19-21 and Figure 2) for the electrical connection lines and the coil windings.

Regarding **claim 11**, Brehmeier-Flick further discloses a device wherein the sensor device comprises at least one pressure sensor (see Column 4, Lines 7-18).

Regarding **claims 12, 13, 14**, Brehmeier-Flick further discloses a device wherein the covering part encapsulating the coil is adapted to be arranged in an interior of the brain, (the covering part 6a is made of silicone, a pressure transmitting medium, Column 4 Lines 32-39) and is equipped with a pressure capable of providing at least one of an intraparenchymal and intraventricular pressure measurements once positioned in an interior of the brain, see also Column 1, Lines 39-56.

Regarding **claim 15**, see claim 1 above.

Regarding **claim 16** Brehmeier-Flick further discloses a device wherein the covering part encapsulating the coil is adapted to be arranged in the epidural (the covering part 6a is made of silicone, a biocompatible material, see Column 4, Lines 32-39 and Column 1, Lines 39-56).

Regarding **claim 18** Brehmeier-Flick/B-Flick teaches the implant of claim 13, wherein the carrier is bendable substantially about a line adjacent to said inductive coil (Brehmeier-Flick/B-Flick teaches a rectangular flexible foil formed from polyimide and

Art Unit: 3736

having a rectangular cross section which is capable of being bent adjacent to the inductive coils).

(10) Response to Argument

The applicant argues that during implantation of the device into the body the carrier moves from the planar shape to a shape wherein the carrier is arranged at an angle from 60 degrees to 120 degrees and the sensor assembly disclosed by Brehmeier-Flick is not moved from a planar shape to a shape wherein the carrier is arranged at an angle from 60 degrees to 120. The applicant further argues that the primary reference Brehmeier-Flick teaches away from providing a sensor which is capable of being bent as recited above because such structure would not conform to the outer skull.

The Examiner Disagrees.

In the Summary of Invention Brehmeier-Flick discloses "A sensor element and a telemetry unit are wired with strip conductors in an inexpensive and reliable manner. The sensor element and telemetry unit are arranged on a flexible foil which can be implanted easily because it can be slid under the skin without twisting or being moved in an undesirable direction. Therefore, the hole that must be made in the top of the skull can be done at a smaller diameter than has been practiced until now." Brehmeier-Flick teaches the sensor being formed of a thin film allows it to be placed through a hole in the top of the skull which permits a smaller diameter hole than before, but does not state that the foil is incapable of being bent at a larger angle or that the angle is crucial to the hole diameter or is an undesirable direction. Furthermore, the disclosure of being

Art Unit: 3736

capable of forming a hole of smaller diameter deals with the a basic concept in medicine to try to do as little harm to the body as possible, in other words minimally invasive, however this does not preclude the use of the device in a more invasive procedure, as one of ordinary skill in the art at the time of the invention would recognize the device disclosed by Brehmeier-Flick is capable of being used in an alternative procedure.

Brehmeier-Flick teaches a sensor comprising structure which when implanted can conform to the outer skull wherein the structure is capable of being bent at an angle from 60 degrees to 120. Brehmeier-Flick discloses a particular method of using the device wherein "the hole to be drilled into the top of the skull can be smaller diameter than before" does not teach that the sensor structure is incapable of being bent at an angle from 60 degrees to 120.

The claim is a device claim which recites a step in which the device is used. The device taught by Brehmeier-Flick in view of B-Flick teaches the device which is capable of being bent wherein the carrier is arranged at an angle from 60 degrees to 120 degrees.

Brehmeier-Flick teaches the device wherein the carrier is formed of a thin flexible film which is rod-shaped with a rectangular cross-section, see Figures 1 and 2 above, wherein the carrier is substantially planer shape (Figures 1 and 2) and is bendable from said planar shape to a shape wherein the carrier is arranged at an angle relative to the plan in which the coil windings of the inductive coil are arranged (the film is flexible and capable of bending such that the carrier is arranged at an angle to the coils 2) and B-

Art Unit: 3736

Flick teaches an implantable pressure sensor device wherein the carrier material is polyimide tape, See Page 978, Paragraphs 1-3.

The Applicant's specification discloses the structure which implied by the process of the carrier moving (bended) from a planar shape to an angle, "The carrier may for example be formed as thin polyimide foil which for stiffening may comprise a cambered form. The carrier may also be rod-shaped with a rectangular cross-section or a circle segment cross-section."

The device taught by Brehmeier-Flick in view of B-Flick teaches equivalent structure to the applicant's disclosed invention which can be used in the process wherein the foil moves from a planar shape to an angled shape bent shape as recited in the claim above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Michael C Stout/

Examiner, Art Unit 3736

Conferees:

/Max Hindenburg/

Supervisory Patent Examiner, Art Unit 3736

Application/Control Number: 10/579,265
Art Unit: 3736

Page 13

Brian Green

/Brian K. Green/

Appeals Conference Specialist